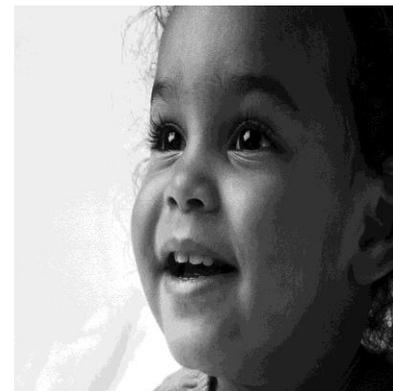


ProQuad®

Vaccine	Recommended Age	Primary Immunization Schedule	
ProQuad® (Merck)	12 months – 12 years	Dose 1	0.5 mL SC
		Dose 2	0.5 mL SC at 4-6 years of age or at least 3 months after the first dose



MMRV Vaccine Recommendations

- MMRV is licensed for children 12 months through 12 years of age.
- Use of MMRV in children 12 through 23 months is associated with a higher risk for fever and febrile seizures 5 through 12 days after the first dose. Compared with the use of MMR and varicella vaccines administered separately at the same visit, this is one extra febrile seizure for every 2,300-2,600 MMRV vaccine doses.

CDC recommends the following:

Dose 1 at Ages 12 through 47 Months:

- Providers who are considering administering MMRV vaccine at ages 12 through 47 months should discuss the benefits (one fewer injection) and risks (increased risk of fever and febrile seizures) of both vaccination options with the parents or caregivers.
- Unless the parent or caregiver expresses a preference for MMRV vaccine, CDC recommends the MMR and varicella vaccine be administered for the first dose in this age group.
- Providers who face barriers to clearly communicate these benefits and risks for any reason (e.g. language barriers) should administer MMR and varicella vaccine rather than MMRV.

Dose 1 at Ages 48 Months and Older and Dose 2 at Any Age:

- For the first dose of measles, mumps, rubella and varicella vaccines at ages 48 months and older and for dose 2 at any age (15 months through 12 years), use of MMRV vaccine generally is preferred over separate injections of its equivalent component vaccines (i.e., MMR and varicella vaccines). Considerations should include provider assessment, patient preference, and the potential for adverse events.

Tuberculin Skin Test (TST)

A TST should be administered before, simultaneously, or at least 4 weeks after MMRV

Vaccine Reconstitution

- Withdraw the entire contents of the diluent vial into a syringe.
- Inject all of the diluent in the syringe into the vial of lyophilized vaccine and gently agitate to mix thoroughly.
- Withdraw the entire contents into a syringe and inject the total volume of reconstituted vaccine subcutaneously (SC).
- Only use the diluent supplied with the vaccine.

Vaccine Storage and Handling

- Store MMRV in the freezer between -58°F and 5°F - (aim for 0°F).

Contraindications:

- History of anaphylactic reaction to neomycin; allergic reaction to gelatin, other components of the vaccine, or after previous vaccination with MMRV vaccine, varicella vaccine, or MMR vaccine.
- Altered immunity (i.e., blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic system).
- Primary or acquired immunodeficiency including HIV infections/AIDS, cellular immune deficiencies, hypogammaglobulinemia, and dysgammaglobulinemia.
- Family history of congenital or hereditary immunodeficiencies, unless the immune competence of the vaccine recipient has been demonstrated.
- Systemic immunosuppressive therapy, including oral steroids ≥ 2 mg/kg of body weight or ≥ 20 mg/day of prednisone or equivalent for persons who weigh > 10 kg, when administered for ≥ 2 weeks.
- Pregnancy

Precautions:

- Do not administer to anyone with moderate or severe acute illnesses until the condition has improved.
- Do not administer for 3-11 months after receipt of antibody containing blood products.
- History of thrombocytopenia or thrombocytopenia purpura.
- A personal or family (i.e. sibling, parent) history of seizures is a precaution for MMRV vaccination. Children with a personal or family history of seizures generally should be vaccinated with MMR and varicella vaccines because the risks of using MMRV vaccine in this group of children generally outweigh the benefit of MMRV vaccine.

Adverse Reactions:

- Fever and febrile seizures. Parents and caregivers should be counseled about the possibility of fever after receipt of a measles-containing vaccine and educated on timing and measure to control it.
- Varicella-like rash at injection site, varicella-like rash (4%-6%), or measles-like rash (3.0%). If a vaccinated person develops a rash, close contact with persons who are at high risk of complications of varicella should be avoided until the rash has resolved.
- The first dose of MMRV vaccine has been associated with rash and higher rates of fever than MMR and varicella vaccines given separately. Rash has been reported in about 1 person in 20 and fever in about 1 person in 5. Seizures caused by a fever are also reported more often after MMRV.
- Injection site pain.
- Rarely thrombocytopenia has been associated with MMR.
- Lymphadenopathy sometimes has been reported after MMR or other rubella-containing vaccine.
- Temporary pain and stiffness in the joints following receipt of MMR or other rubella-containing vaccine.
- Rarely parotitis has been reported following MMR or other mumps-containing vaccine.
- Zoster caused by varicella vaccine virus has been reported.

